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## First Record of *Melanomya* RONDANI (Diptera, Calliphoridae) from Japan

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**Abstract** The genus *Melanomya* RONDANI, 1856, is recorded for the first time from Japan. It is represented by two species: *M. nana* (MEIGEN, 1826) and *M. petiolata* sp. n. The latter is described as new and placed in the subgenus *Eggisops* RONDANI, 1862.

*Melanomya* RONDANI, 1856, is a small genus of Holarctic distribution. The biology is still only superficially known, but all species are probably parasites of snails. DOWNES (1986) revised the Nearctic *Melanomya* and applied a broad generic concept by including *Eggisops* RONDANI, 1862, *Angioneura* BRAUER et BERGENSTAMM, 1893, and *Opsodexia* TOWNSEND, 1915, as subgenera of *Melanomya*. Two small Neotropical genera, *Glutoxys* ALDRICH, 1929, and *Pseudopsodexia* TOWNSEND, 1935, were included with *Melanomya* in a *Melanomya* group of uncertain position within the Calliphoridae. However, similarities within the female terminalia of *Melanomya*, *Melinda* ROBINEAU-DESVOIDY, 1830, and *Paradichosia* SENIOR-WHITE, 1923, seem to indicate that these genera may constitute a monophyletic group (ROGNES, 1986; in litt.).

The genus *Melanomya* is not represented in the Oriental Region (JAMES, 1977), and no species of *Melanomya* has previously been recorded from the eastern part of the Palaearctic Region (HERTING, 1961; KANO & SHINONAGA, 1968), but in a search for Japanese specimens of the Rhinophoridae, the following two species were discovered.

### *Melanomya nana* (MEIGEN, 1826)

**Material examined.** [Japan] Hokkaido, Mt. Rausu, 3 ♂, 3. viii. 1967 (T. SAIGUSA); Hokkaido, Shari-machi, 1 ♂, 2. viii. 1967 (M. HONDA). (One male in the Zoological Museum, University of Copenhagen, others in the Department of Medical Entomology, National Institute of Health, Tokyo.)

**Distribution.** Europe from the British Isles to North Kazakhstan. Japan.

### *Melanomya petiolata* sp. n.

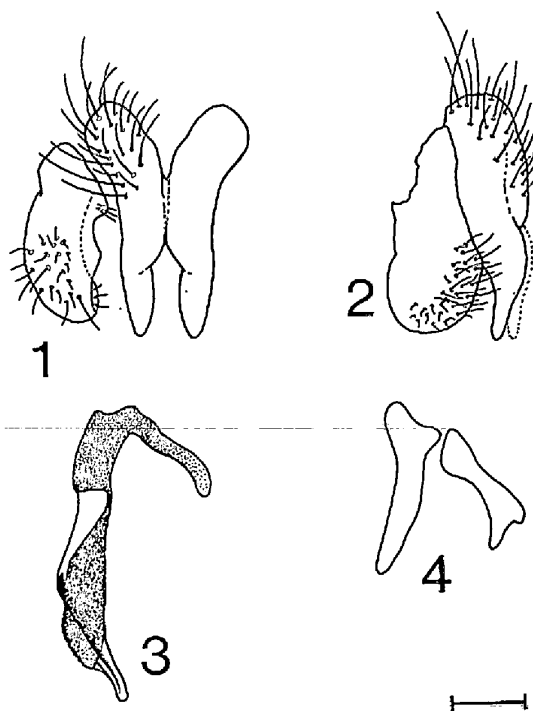
(Figs. 1-5)

**Etymology.** From the Latin: *petiola*=stalk, petiole. The present species is the only species of *Melanomya* with a petiolate wing cell  $r_{4+5}$ .

*Type material.* Holotype ♂: [Japan] Tazawa-ko, Akita Prefecture, 11. ix. 1966 (M. SUWA). The holotype is deposited in the Department of Medical Entomology, National Institute of Health, Tokyo.

*Diagnosis.* Black species with traces of brownish microtomentum on thorax and abdomen. Lower calypteres fumose and wings fumose along the veins. Holoptic. Parafacial plate densely setose. Wing cell  $r_{4+5}$  long petiolate.

*Description.* Male. Black with traces of greyish brown to olive brown microtomentum on dorsum of thorax and abdomen. Head, legs and sides of thorax with sparse grey microtomentum. Genal groove dark reddish; proboscis, palpus and haltere light brown. Lower calyptere with the thickened rim light brown and covered with white hairs; a broad, dark fumose band runs along the margin, and the central part is weakly fumose. Wings with black tegula and basicosta, and broad fumose bands along the veins. Head holoptic, eyes separated by about  $0.5\times$  diameter of anterior ocellus at narrowest part of frons. Ocellars and outer verticals well developed, inner verticals not differentiated. Parafacial plate densely setose in full length. Lunula bare. Facial plate without keel. Antennal arista haired in basal 0.6, longest hairs about  $2\times$  greatest aristal diameter. Thorax without coxopleural streak (meron fused to katepimeron). Subscutellum small



Figs. 1-4. *Melanomya petiolata*, male terminalia. — 1, Cerci and left surstylus, posterior view; vestiture of right cercus omitted; 2, cerci and surstyli, lateral view, right cercus shown in dotted outline; 3, aedeagus; 4, left gonopod and paramere, lateral view. Scale: 0.1 mm.

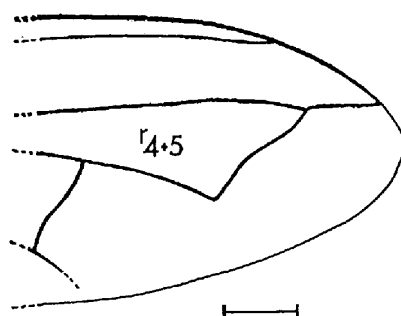


Fig. 5. *Melanomya petiolata*, tip of right wing. Setulae, clothing microtrichiae and fumosity omitted. Scale: 0.6 mm.

but distinctly convex. Chaetotaxy: *acr* 1-2+3, *dc* 2-3+4, *ia* 2+2, *sa* 1+3. Scutellum with 3 pairs of marginals, 1 pair of apicals. Proanepisternum (upper part of propleuron) setose. Wings with costal spine and 2 subequal setulae at base of  $R_{4+5}$ . Cell  $r_{4+5}$  long petiolate (Fig. 5). Lower calypteres without dorsal hairs, inner margin following scutellum for a considerable distance before turning outwards almost perpendicular to the median plane. Legs: fore tibia with 4 *ad*, 4 *pv*; mid tibia with 3-4 *ad*, 1-3 *pd*, 5 *p*, 1-2 *v*; hind tibia with a row of *ad*, 4 *av*, 2-4 *pd* of unequal size. Abdominal tergites 1+2-3 without marginal bristles, T4-5 with a row of marginals, T5 with some scattered, weak discal bristles. Terminalia as illustrated in Figs. 1-4.

Length. 7.0 mm.

Female. Unknown.

Distribution. Japan.

*Melanomya petiolata* seems to be very closely related to the European *M. pecchiolii* (RONDANI, 1862) and keys out to *Eggisops* in ZUMPT's (1956) key to Palearctic Calliphoridae. DOWNES (1986) used the presence of lunular setulae in his definition of the subgenus *Eggisops*, and although the lunule of *M. petiolata* is bare, the species fits the subgeneric diagnosis in all other respects.

Various species of the genus *Melanomya* have been treated as belonging to the Rhinophoridae. HERTING (1961), who revised the Palearctic Rhinophoridae, included *Melanomya* and *Angioneura* (as genera), and his opinion was followed by CROSSKEY (1977). SCHUMANN (1986) seems to agree, as he only lists *Eggisops* in his catalogue of Palearctic Calliphoridae, but TSCHORSNIG (1985) mentions the possibility that even this genus may belong to the Rhinophoridae. Much evidence, however, seems to indicate that *Melanomya* sensu lato should be included in the Calliphoridae (DOWNES, 1986; PAPE, 1986; ROGNES, 1986).

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genus-group.

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